

Studies on Cicindelids. XXXI. Notes on some Tiger Beetles from the Cameroon, with description of a new species of *Euryarthron* GUERIN

(Coleoptera, Cicindelidae)

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Abstract

Une espèce nouvelle d'*Euryarthron* GUERIN (*E. nageli* sp. n.) est décrite du Cameroun (région de l'Adamaoua). On donne aussi la liste de quelques autres Cicindélides récoltés également dans la même localité.

A new species of *Euryarthron* GUERIN (*E. nageli* sp. n.) is herein described from the Cameroon (Adamaoua region). An annotated list is also given of some other *Cicindelidae* collected in the same area.

Through the courtesy of Dr. Peter NAGEL (Lehrstuhl für Biogeographie, Universität des Saarlandes, Saarbrücken, German Federal Republic) I could examine the Cicindelid specimens collected by Dr. NAGEL himself, and by his Colleagues W. FLACKE and P. MÜLLER, during an expedition run by his Institute to Northern Cameroon. These represent a small collection of 56 specimens belonging to 10 different species, one of which resulted to be new to science and is here described in the present paper.

All the specimens have been collected between 14th March and 6th April 1979 in a same locality, lying about 20 km south of Minim (coordinates 6°49'N, 12°52'E), at 1200 m above sea-level, in the region of Central Adamaoua. As a whole, the small sample gives therefore a quite precise idea of the Cicindelid biocoenosis occurring in the visited area. This is a tree savannah area with relatively wide valleys, flat slopes and narrow gallery forests (for better ecological informations, see MÜLLER, NAGEL & FLACKE 1980, 1981).

I wish to express thanks to Dr. Peter NAGEL for allowing me to study this interesting materials, and to Mr. Geoffrey KIBBY (British Museum, Natural History) for the opportunity to examine a paratype of *Euryarthron babaulti* W. HORN.

List of species

Tribe *Cicindelini* SLOANE, 1906

Subtribe *Prothymina* W. HORN, 1908 (sensu RIVALIER, 1971)

Euryarthron nageli sp. n. (Fig. 1)

Diagnosis: A quite small species, dark bronze with blackenish elytra; thorax subsquared, shoulders well marked, wings reduced, probably non-functional. Elytral maculation formed by a submarginal central spot, slightly hooked on disk, and a subapical spot. Tibiae rufescent.

Description: Head dark bronze, with green, cupreous or blue reflections on cheeks and forehead. Sculpture well marked; striae longitudinal on vertex and eyes, oblique in the middle, transversely undulated behind. Surface glabrous, with only two long intraorbital setae near both eyes. Labrum testaceous, slightly darkened on margins, five-dentate, the three central teeth separated from the outer ones

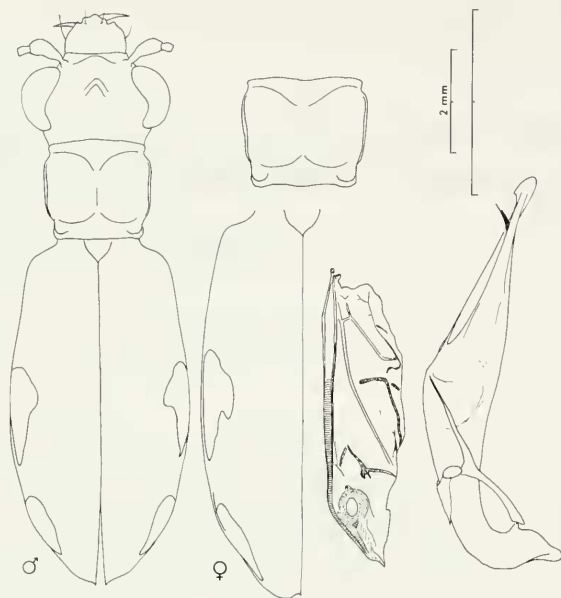


Fig. 1: *Euryarthron nageli* sp. n.

by marked incisions; four setae near forward edge (central pair submarginal, outer pair marginal). Labial and maxillary palpi testaceous, the last joints pitch-black. Scape and segments 2–4 of the antennae dark, third and fourth joints apically annulated with bright metallic green; articles 5–11 brown-rufescent, finely pubescent. Three setae on the scape near the apex.

Thorax subsquared, nearly as long as broad, subparallel sided; colour dark bronze, with cupreous and bluish reflections near the outer margins, on the posterior callus and in the transverse furrows. Sculpture well marked, with undulate, rather cerebriform striations. Episterna shiny, black, with bluish reflections near the basis and the posterior edge.

Elytra blackenish, with bronze and blue-green reflections near the outer margins; shoulders quite well marked. Sculpture strong and uniform, prothymoid, with roundish close alveola on the whole surface; a row of some larger foveae parallel to, but some distance from, the suture. Elytral maculation composed by a submarginal elongate central spot, slightly hooked on disk, and a subapical elongate patch; humeral dot lacking in both sexes. Apical angle almost right, slightly retracted in the ♀, with a very short sutural spina. Wings reduced, probably non-functional, almost as long as the elytral length, much longer however than the short vestigial stumps of the wingless *Euryarthron*-species.

Underside dark bluish-green, with coppery reflections on coxae and sternal pieces; last segment of the abdomen, and edge of the penultimate one, rufescent brown. Femora metallic green, more or less bluish, brown-violet at their apex; tibiae mostly rufescent, apically darkened; tarsi dark metallic, slightly rufescent at base of articles. Trochanters ferrugineous.

Male aedeagus elongate, progressively narrowed after the middle, with a hooked, spearhead-like apex; distal opening large, with apex of flagellum protruding externally.

Length: ♂♂ 11,5–12 mm; ♀♀ 12,5–13 mm (without labrum).

Holotype ♂, allotype ♀ and 11 paratypes ♂♂♀♀ from the CAMEROON: Adamaoua, 20 km S of Minim (6°49' N, 12°52' E), 1200 m above sea-level, W. FLACKE, P. MÜLLER and P. NAGEL leg.; most of the specimens have been collected at light trap or pitfall trap outside gallery forest. Holotype, allotype and six paratypes in the collection of the Saarland University (Saarbrücken, German Federal Republic), a paratype ♂ in the collection of the Royal Museum of Central Africa (Tervuren, Belgium), four paratypes in my own collection.

Derivatio nominis: I am pleased to name this new species in honour of Dr. Peter NAGEL, who kindly submitted the type series for study.

Notes: This new species recalls very much *E. babaulti* W. HORN, 1926, with a paratype of which I could compare it. *E. babaulti*, nevertheless, is a larger species, more corpulent, with a transverse pronotum (rather than subsquare), and with more vestigial wing (long nearly half an elytron); moreover, it has a well marked humeral lunule, and smaller roundish submarginal spots.

Subtribe *Cicindelina* W. HORN, 1908

Elliptica deyrollei (GUÉRIN MÉNEVILLE) 3♀♀

Widely distributed throughout most of the Sahelian region from Senegal to East Africa, this species was already known from Cameroon (HORN 1911, 1921). To the previously recorded countries (CASSOLA 1978b), it has to be added the Togo as well (KOLBE 1894).

Elliptica lugubris (DEJEAN) 2♂♂

This species, too, is widely distributed from Senegal to East Africa, and had already been recorded from the Cameroon by HORN (1921). As far as I know, it occurs in the following countries: Senegal, Guinea, Mali (Koulikoro), Sierra Leone, Ivory Coast (Dabakala), Togo, Nigeria (Kankiya, Azare), Cameroon, Central African Republic (Sibut, Crampel), Uganda (Tororo), Kenya (Trans Nzoia) and NE Zaire (Aru).

Rhopaloteres n. nysa (GUÉRIN MÉNEVILLE) 4♂♂ 8♀♀

The species as a whole is widely distributed through equatorial Africa from Senegal to Ethiopia and southwards to Shaba and Tanganyika Lake. The eastern part of this wide range is occupied by the ssp. *quedenfeldti* W. HORN, darker in colour, with smaller elytral markings. The specimens caught at Minim appear to be quite small, with large and apparent elytral spots, often merging into each other, and belong therefore to the nominate form. This species was already known from several localities of Cameroon (HORN 1905, 1911, 1921).

Rhopaloteres f. flavosignatus (CASTELNAU) 6♂♂ 3♀♀

As far as I know, this species is recorded from Guinea, Togo, Cameroon, Central African Republic, Sudan (Bahr-el Ghazal) and, with a ssp. *flavoreductus* W. H. of doubtful validity, from Uganda, Kenya and NE Zaire. More recently VAN NIDEK (1980) has described a ssp. *cupreoreductulus* on the basis of specimens collected in northern Zambia and Tanzania („D. O. Afrika“). With regard to Cameroon, several localities are known in the entomological literature (HORN 1911, 1921).

Rhopaloteres convexoabrupticollis (W. HORN) 1♂ 3♀♀

This interesting and apparently rare species was known up to now only through its holotype from Yalinga (Central African Republic), seven specimens from Cameroon (collected by A. GIDE between “N’Gaoundin” and Tibati, and erroneously described by RIVALIER, 1946, with the name of *Cicindela gidei*), and, more recently, three specimens from Monotubo in Northern Zaire (CASSOLA 1978a).

Rhopaloteres cinctus (OLIVIER) 1♂

A common species, widely distributed in the whole of western and central Africa from Senegal to Sudan, Uganda, and southwards to Shaba (= Katanga). With regard to the Cameroon, it had been previously recorded from several localities by HORN (1905, 1911, 1921). The single specimen collected at Minim belongs to the green form (m. *viridovelutina* MANDL).

Lophyra (*Stenolophyra*) *gemina* (W. HORN) 1♀

A very rare species, hitherto known by means only of three specimens from Cameroon (prov. Joko) and few additional specimens from NE Zaire (Moto, Tomati, Kibali-Ituri; Yebo, Duru River, Upper Uele; Buye River, zone of Ango) (CASSOLA 1978a, b). This new record constitutes therefore an additio-

nal interesting information about the apparently quite restricted range of this nice species. Since, however, this is quite difficult to separate from the green forms of the more widely distributed *L. (S.) luxeri* (DEJEAN), it is to be expected that other specimens of *L. gemina* are probably kept in the entomological collections under the name of *L. luxeri*.

Myriochile (Monelica) fastidiosa (DEJEAN) ssp. *vicina* DEJEAN 1♂ 4♀♀

A common species, widely distributed throughout most of Africa, occurring with the nominate form even in the Indian peninsula. From the Cameroon it had been already recorded by HORN (1911, 1921), and moreover I have seen two additional specimens collected at Mbalmayo in the collection of Dr. C. JEANNE (Bordeaux, France).

Myriochile (Monelica) flavidens (GUÉRIN MÉNEVILLE) 2♂♂ 4♀♀

This species was recorded from Cameroon (Wutschiri on the River Mekai, zone of Yoko) by HORN (1921). As far as I know, it occurs also in the following countries: Guinea-Bissau, Guinea, Upper Volta, Togo, Central African Republic, southern Sudan, NE Zaire, Uganda, Erithrea, as well as northern Nigeria (Kankiya, June 1964, L. G. SEGERS leg., 1♀, in the collection of the Royal Museum of Central Africa of Tervuren, Belgium).

All the specimens collected at Minim have a much reduced elytral pattern, in some cases almost invisible, similar, however, to that figured by HORN (1938, plate 37, No. 22); the apical lunule, nevertheless, is reduced to a small subapical dot, and all the ♀♀ lack the humeral spot.

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